Index of Claims

| App | lica | itio | n | No. |
|-----|------|------|---|-----|

Alexander Thomas

10/737,017

Examiner

Applicant(s)

**ULLMAN ET AL** 

Art Unit

1772

√ Rejected
= Allowed

| - | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| ı | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

|  |                | _  |              |          |          |  |         |              | Ц_           |                  |
|--|----------------|--|--------------|----------|----------|--|---------|--------------|--------------|------------------|
| Cla  | aim            | Date   |              |          |          |  |         |              |              |                  |
| Final  | Original       | 919/8  |              |          |          |  |         |              |              |                  |
|  |                | ~  | ╫            | ╁        | +        | $^{+}$                                 | ╁       | ╁            | ╁            | ╁                |
|  | 2              | A  | 1            | $\top$   | 1        | 1                                      | T       | T            | 十            | T                |
|  | 2 3            | Т  | Τ            | T        | T        | $\top$                                 |         |              | T            |                  |
|  | 4              | П  | 1            | T        | T        | T                                      | 1       | 1            | 1            | 1                |
|  | 5              | П  |              |          |          |  | $\perp$ |              |              |                  |
| L  | 6              | 11   | 1_           | _        | _        | 1_                                     |         | ┸            |              |                  |
|  | 7              | Ц.   |              |          |          | 1_                                     | _       | ┸            | 1_           | _                |
|  | 8              | V  | _            | $\perp$  | ↓_       | ╄                                      | 1       | <del> </del> | 4            | ╄                |
|  | 9              | <u>                                     </u>     | ╀            | ┺        | ╁_       | ↓_                                     | ┿       | 1            | ↓_           | _                |
|  | 10             | <b>!</b>   | +-           | ⊬        | ╂        | ╀                                      | +       | -            | -            | ⊢                |
| $\vdash$   | 11             | ×  | ╀            | +-       | ╂        | ╁                                      | ╀       | ╁            | ┿            | ╀                |
| -  | 12<br>13       | 쒸  | +            | ╀        | ╁╌       | ╁                                      | +       | ┼-           | ╁            | $\vdash$         |
| -  | 14             | 1  | +            | ╁        | ╁        | ╁┈                                     | +       | ╁╴           | ╁╌           | -                |
| <b>—</b>   | 14<br>15       | V  | <del> </del> | +        | ╁╴       | ╁╴                                     | ╁╴      | +            | +            | ╁                |
|  | 46-            | <del>                                     </del> | $\vdash$     | ╁        | +-       | ╁                                      | +       | +            | +-           | <del> </del>     |
|  | 17             | $\overline{\mathbf{v}}$                          | 忊            | İ        |          | 1                                      | 1       | †            | 1            | T                |
|  | 17<br>18       | À  |              |          |          |  |         | 1            | Τ            | T                |
|  | 19             | П  |              |          |          |  | T       | T            |              |                  |
|  | 20             | $\prod$  | $oxed{oxed}$ |          |          |  |         |              |              |                  |
| L  | 21             | L  |              |          | L        |  |         |              |              |                  |
| L  | 22<br>23<br>24 | Щ  | L            | <u> </u> | _        | $oldsymbol{oldsymbol{oldsymbol{eta}}}$ | _       | 1_           | _            | _                |
|  | 23             | _  | <u> </u>     | L        | _        | ↓_                                     | _       | <u> </u>     | $oxed{oxed}$ | $ldsymbol{oxed}$ |
| $\vdash$   | 24             | ╟  | ⊢            | <u> </u> | ▙        | ┺                                      | ↓_      | ┞-           | _            | <u> </u>         |
| <del>                                     </del> | 25             | ₩  | ┝            |          | ├        | ┼                                      | ╁       | ⊬            | ┼            | <b>!</b>         |
|  | 26<br>27       | -  | -            | -        | Ͱ        | ╁                                      | ╀       | ╁            | ╁            | _                |
|  | 28             | t  | ┢            |          | ┢╌       | ┢                                      | ╁       | ├            | ⊢            |                  |
|  | 28<br>29       | V  | H            |          | $\vdash$ | +                                      | ╁       | ┼            | ╁            | -                |
|  | 30             | Ť  | ╁            | ┢        | ╁        | $\vdash$                               | ╁╌      | ╁            |              |                  |
|  | 31             |  |              |          |          |  | ┢       | <del> </del> | H            | Н                |
|  | 32             |  |              |          |          |  | İ       | $\vdash$     | 1            |                  |
|  | 33             |  |              | Г        |          |  |         |              |              |                  |
|  | 34             |  |              |          |          |  |         |              | <u> </u>     |                  |
|  | 35             |  |              |          |          |  |         |              |              |                  |
|  | 36             |  |              | L_       | _        |  | L       |              |              |                  |
|  | 37             |  | _            | _        |          | _                                      |         |              | L            |                  |
|  | 38             |  |              | _        | _        | _                                      | _       | _            |              |                  |
|  | 39             |  | _            |          | _        | <u> </u>                               | <b></b> | <u> </u>     |              |                  |
|  | 40             | _  | -            |          |          | <u> </u>                               | _       | <u> </u>     | $\vdash$     | $\vdash$         |
| $\dashv$   | 41             |  | $\vdash$     | -        | <u> </u> | -                                      | -       | $\vdash$     | $\vdash$     | Щ                |
|  | 43             | -  | Н            |          | $\vdash$ | $\vdash$                               | -       | -            | $\vdash$     | $\dashv$         |
|  | 44             | -  | $\vdash$     | -        | _        | $\vdash$                               | -       | $\vdash$     | Н            |                  |
|  | 45             | -  | $\vdash$     |          | -        | $\vdash$                               | -       | -            | Н            | $\dashv$         |
|  | 46             | ٦  | $\Box$       | _        |          |  |         | $\vdash$     | Н            | $\dashv$         |
|  | 47             |  |              |          | _        |  |         |              | Н            | $\neg$           |
|  | 48             |  |              |          |          |  |         |              |              |                  |
|  | 49             |  |              |          |          |  |         |              |              |                  |
|  | 50             |  | $\neg$       |          |          |  |         |              |              | $\neg$           |

| С            | laim       | Т  | Date         |              |  |          |  |  |                                     |                |  |  |
|--------------|------------|--|--------------|--------------|--|----------|--|--|-------------------------------------|----------------|--|--|
| <u> </u>     |            | †-   | Т-           | Т            | Т  | T        | Ť  | Τ.   | Т                                   | T-             |  |  |
| <del>-</del> | Original   |  | 1            |              | 1  | 1        |  |  |                                     |                |  |  |
| Final        | · <u>ē</u> | 1  | ı            | 1            |  | 1        |  |  |                                     | 1              |  |  |
| <u> </u>     | 15         |  |              | 1            |  | 1        | 1  |  | 1                                   | 1              |  |  |
|              |            |  | 1            |              | 1  | 1        |  | 1  |                                     |                |  |  |
|              | 51         | Γ  | T            |              | Т  | Т        | Т  | Т  |                                     |                |  |  |
|              | 52         | Ī  | T            |              | T  | 1        | 1  | T  | 1                                   | İ              |  |  |
|              | 52<br>53   | t  | 1            | 1-           | +  | 十        | $\top$   | T  | ╅                                   | $\top$         |  |  |
| -            | 54         | 十  | ╁╴           | +-           | ╁  | ╁        | +-   | +-   | +-                                  | +              |  |  |
| -            | 55         | ╁  | ╁            | ╁            | ╫  | +        | ╫  | +-   | +-                                  | +              |  |  |
|              | 56         | ╁╌   | ╄            | ╀            | +  | ┿        | +-   | +  | +                                   |                |  |  |
|              | 50         | ╁  | +-           | ╁            | +  | ╀        | +  | +-   | +                                   |                |  |  |
| <u> </u>     | 57<br>58   | ┞-   | +            | 4            | _  | $\perp$  | ╀  | $\perp$  | 4_                                  | ļ              |  |  |
|              | 58         | L.   | 1            | 1            | _  | $\perp$  | _  | ┸  | 1                                   | <u> </u>       |  |  |
| L            | 59         |  | L            | ┸            |  |          | L  | L  |                                     |                |  |  |
|              | 60         |  |              |              |  | . ].     |  |  |                                     |                |  |  |
|              | 61         |  | Γ            | T            |  | Т        |  | T  | T                                   | T              |  |  |
|              | 62         |  |              | T            | T  | 1        | T  | 1  | Τ                                   | 1              |  |  |
|              | 63         | $I^-$  | T            | $\top$       | †  | †        | †  | †-   | T                                   | +              |  |  |
| $\vdash$     | 64         | <del>                                     </del> | T            | +            | +  | +        | +-   | +  | +-                                  | +              |  |  |
| -            | 65         | $\vdash$   | ╁╴           | +            | ╁  | +-       | +  | +  | +                                   | -              |  |  |
|              | 66         | ├  | ╁            | ╁╌           | ╁  | +        | ╁┈   | +-   | ╀                                   | +              |  |  |
|              | 00         | H  | ┼            | +-           | +-   | -        | +  | +-   | +                                   |                |  |  |
|              | 67         | _  | ╀            | -            | ┿  | ╀        | +  | +  | +-                                  |                |  |  |
| <b>⊢</b>     | 68         | <u> </u>   | 1_           | ╄            | 1  | ╀        | 1  | ╀  | _                                   | ↓_             |  |  |
|              | 69         | L.   | _            | 1            | $\perp$  | ↓_       | $\perp$  | ┺  | 1_                                  | Ь.             |  |  |
|              | 70         |  | _            | $\downarrow$ | $\perp$  | ╙        | L  | $oxedsymbol{oxed}$   | ┸                                   | <u></u>        |  |  |
|              | 71         |  |              |              | 1_   |          |  |  |                                     |                |  |  |
|              | 72         |  |              |              |  |          | П  | T  |                                     | "              |  |  |
|              | 73<br>74   |  |              | Т            |  |          | T  | T  |                                     |                |  |  |
|              | 74         |  |              |              | Τ  | Τ        | T  |  | T                                   |                |  |  |
|              | 75         |  |              | 1            |  |          | T  | Τ  |                                     |                |  |  |
|              | 76         |  | T            | T            | <b>†</b>   |          | 1  | T  | $\vdash$                            | $\mathbf{I}$   |  |  |
|              | 77         | _  | ✝            | t            | †-   | +        | 1  | T  | ┪                                   | 1-             |  |  |
| -            | 78         | -  | ╫            | $\vdash$     | ╁╴   | 十        | +  | ╁╌   | ┤                                   | Н              |  |  |
| -            | 79         | _  | $\vdash$     | $\vdash$     | $\vdash$   | ╁        | ╁  | ╁╌   | -                                   | Н              |  |  |
|              | 80         | _  | -            | ╁╾           | +-   | ╀        | ╁  | ╀  | ╀                                   | $\vdash$       |  |  |
| $\vdash$     | 81         |  | ⊢            | -            | ╁  | ╀        | -  | ├  | ┾                                   | $\vdash$       |  |  |
| <u> </u>     | 01         |  | _            | ⊢            | ├-   | ┞        | <del> </del>                                     | ├_   | <del> </del>                        |                |  |  |
| <u> </u>     | 82         |  | <u> </u>     | ┡            | ļ.,  | <u> </u> | _  | _  | _                                   | <u> </u>       |  |  |
| <u> </u>     | 83         |  |              | -            | <b> </b>   |          | <del> </del>                                     | <del> </del>   | ┞                                   | Ш              |  |  |
| <u></u>      | 84<br>85   |  | <u> </u>     | $\vdash$     | <b>L</b>   | 1        | _  | $\perp$  | _                                   | Ш              |  |  |
|              | 85         |  | ļ            | <u> </u>     | <u> </u>   | _        | <u> </u>   | $oxed{igspace}$  | _                                   |                |  |  |
| ļ            | 86         |  | $oxed{oxed}$ | $oxed{oxed}$ | <u> </u>   | L_       | _  | $oldsymbol{ol}}}}}}}}}}}}}}}}}}$ | L                                   | Ш              |  |  |
|              | 87         |  |              |              | L  | L        | Ĺ  |  | L                                   | $\Box$         |  |  |
|              | 88         |  |              | Ľ            | $L^{-}$  | L        |  |  |                                     |                |  |  |
|              | 89         |  |              |              |  | Γ        |  |  |                                     | П              |  |  |
|              | 90         |  |              |              | 1  |          |  | Г  |                                     | П              |  |  |
|              | 91         |  |              |              | Г  |          | Г  | Г  | Г                                   | М              |  |  |
|              | 92         |  | <u> </u>     | Ι-           | $\vdash$   | Т        | $\vdash$   | <u> </u>   |                                     | $\vdash$       |  |  |
| $\vdash$     | 93         | _  | -            |              | 1  | 1        | <del>                                     </del> | <del>                                     </del>   | 1                                   | Н              |  |  |
|              | 94         | -  |              | $\vdash$     | <del>                                     </del> | $\vdash$ | $\vdash$   | $\vdash$   | -                                   | $\vdash$       |  |  |
| _            | 95         | $\neg$   | -            |              |  | _        | $\vdash$   | <del> </del>   | -                                   | Н              |  |  |
|              | 96         | -  | _            | $\vdash$     | ├─   | $\vdash$ | <del> </del>                                     |  |                                     | Н              |  |  |
| _            | 97         |  |              | ⊢            | _  | -        | ├—   | ├-   | $\vdash$                            | $\vdash\vdash$ |  |  |
| $\vdash$     | 91         | _  |              | $\vdash$     | -  | <b> </b> | <u> </u>   | <u> </u>   |                                     | Ш              |  |  |
| $\vdash$     | 98         | $\dashv$   | _            | $\vdash$     | <u> </u>   | <u> </u> | <u> </u>   | _  | _                                   | Н              |  |  |
| ļ            | 99         | _  |              | 匚            | L  | L        | <u> </u>   | L.,  | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ |                |  |  |

100

|        | lair-             | T-             |  |           |          |          |              |          |  |          |
|--------|-------------------|----------------|--|-----------|----------|----------|--------------|----------|--|----------|
|        | laim              | ┿              | Date   |           |          |          |              |          |  |          |
| Final  | Original          |                |  |           |          |          |              |          |  |          |
|        | 101               |                |  | <u> </u>  | T        | 1        | T            | T        | $\dagger$  | $\top$   |
|        | 102               |                |  | I         | I        |          |              |          |  |          |
|        | 103               |                |  |           |          |          | $\perp$      |          |  |          |
| L      | 104               | $\perp$        | _  | _         | 1_       | 1_       | 1            | 1_       | ┸  | <u> </u> |
|        | 105               | ╁-             | Ļ  | ╄         | ╄        | -        | ╀            | $\perp$  | ╄  | $\perp$  |
|        | 106<br>107        | ╁              | +  | +-        | +-       | ╁        | +-           | ╁        | ╄  | ╀        |
| -      | 108               | +              | ┿  | ╁         | ╁        | ╁        | +            | ╂        | ╁  | -        |
|        | 109               | ╁╴             | ╁  | +         | ╁╴       | ╁        | +            | ┿        | ╁  | $\vdash$ |
|        | 110               | $\top$         | ✝  | $\top$    | †        | T        | ╁            | $\vdash$ | 1  | Н        |
|        | 111               | $\top$         |  | $\top$    | T        | T        | $\top$       | 1        | †  |          |
|        | 111<br>112        |                |  |           |          |          | Τ            |          |  |          |
|        | 113               |                |  | L         | L        |          | Г            |          |  |          |
| L      | 114<br>115        | ļ              | 上  | Ш         | Ļ        | $\perp$  | L            | 上        |  |          |
|        | 115               | ↓              | ↓_   | 1_        | 1_       |          | ╄            | -        | 1_   | Щ        |
|        | 116               | -              | ╀  | 4         | -        | 1        | ╀            | ╄        | 1  | Щ        |
| ļ      | 117<br>118        | ╁              | ┿  | ╀         | $\vdash$ | +        | ┼            | ╁        | <del> </del>                                     | -        |
|        | 119               | +              | ╁  | ╁         | ╁        | +        | ⊢            | ╁        | +-   | Н        |
|        | 120               | ╁              | ╫  | ╁         | ┢        | +        | ╁            | +        | ╁  | +        |
| _      | 121               | ╁              | 十  | +         | H        | t        | +-           | ╁        | +  | +        |
|        | 122               | İΤ             | 1  | 1         | T        |          | 1            | T        |  | П        |
|        | 122<br>123        |                | Γ  |           |          |          | 1            |          | T  | П        |
|        | 124               |                |  | L         |          | L        |              |          |  |          |
|        | 124<br>125<br>126 | <u> </u>       | L  | <u> </u>  | _        | _        | <u> </u>     | ┖        | ļ.,  |          |
|        | 126               | ↓_             | -  | _         | L        | 1        | <u> </u>     | <u> </u> | <u> </u>   | Ш        |
|        | 127<br>128        | ┼              | ╀  | ⊢         | ▙        | ╀        | ⊢            | ـ        | ļ  |          |
|        |                   | ╁╾             | -  | ├         | ⊢        | ╀        | -            | ╀        | ╀  | Н        |
|        | 130<br>131<br>132 | ╁              | ╁╌   | ╁         | ┢        | ╁        | ╁            | 1        | ┢  | Н        |
|        | 131               | <u> </u>       | <del>                                     </del> | $\vdash$  | _        | t        | <del> </del> | †        | <del>                                     </del> | H        |
|        | 132               |                | ✝  | $\vdash$  |          | <u> </u> |              | T        | T  | $\vdash$ |
|        | 133<br>134        |                |  |           |          |          |              |          |  |          |
|        | 134               |                |  |           |          |          |              |          |  |          |
|        | 135               | <del> </del> _ | _  | L         | _        |          | L            | L.       |  | Ц        |
|        | 136               | ļ              | <u> </u>   | ļ         | _        | <b> </b> | L            | <u> </u> | _  | Ш        |
|        | 137               | <del>  -</del> | _  | -         | <u> </u> | <u> </u> | _            |          |  | Н        |
|        | 138<br>139        | $\vdash$       | ┝  | -         | ┝        | -        | -            |          | ┝  | Н        |
| -      | 140               | -              | ├  | ┝         | -        | ├        | -            | ⊢        | _  | Н        |
| $\neg$ | 141               | $\vdash$       | <u> </u>   |           | $\vdash$ | $\vdash$ | $\vdash$     | $\vdash$ | <u> </u>   | H        |
|        | 142               |                |  | -         |          | T        | $\vdash$     |          | $\vdash$   | Н        |
|        | 143               |                |  |           | _        |          | $\vdash$     | $\vdash$ |  | Н        |
|        | 144               |                |  |           |          |          |              |          |  |          |
|        | 145               |                |  |           |          |          |              |          |  |          |
|        | 146               | L_             | L  | Ш         |          | oxdot    | L            | L        |  |          |
|        | 147               |                | <u> </u>   | $\square$ |          | $\vdash$ | _            |          |  |          |
|        | 148<br>149        | $\vdash$       | _  | Н         |          | Н        | -            | _        | Щ  | Н        |
|        | 150               |                |  | $\vdash$  | _        | $\vdash$ | _            | Н        |  | $\dashv$ |
| - 1    | .50               |                | 1  |           |          |          | 1            |          | 1  | - 1      |